Statistical Bulletin

METROPOLITAN LIFE INSURANCE COMPANY

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Divorce and Size of Family

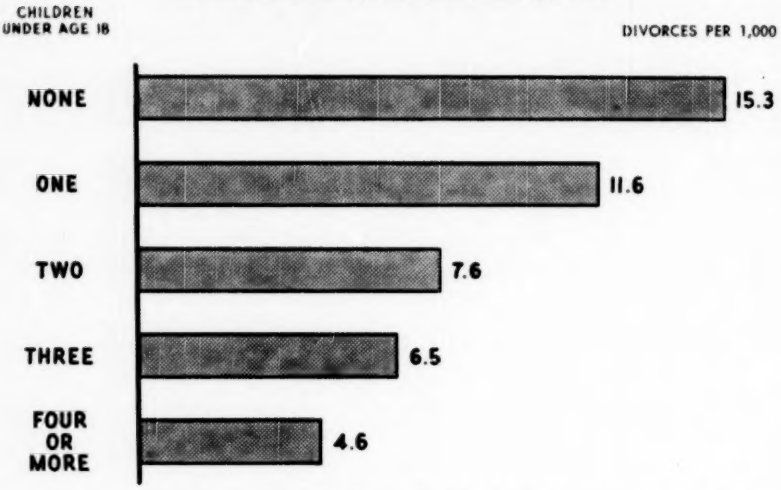
DIVORCE in families where there are children is more common than is generally realized. Of all the divorces (including annulments) granted in the United States in 1948, no less than 42 percent were to couples with children; this compares with 38 percent in the period 1922-1932. However, the average number of children in such families, namely, 1.8, has remained the same in both periods. This means that the number of children affected by divorce has increased even more rapidly than has the number of divorces. In 1948, about 313,000 children under age 21 were involved in the 421,000 absolute decrees granted. Thus, including the marital partners, there were almost 1.2 million persons in families dissolved by divorce; and this large number does not include individuals in homes broken by separation or desertion, for which data are not available.

The proportion of divorces involving children varies considerably with the duration of marriage. According to the experience in 1948, the proportion with children rises from about 10 percent for marriages ended before the first year to a peak of 65 percent in the 18th year of marriage. Beyond that, the proportion drops steadily as the children grow up and leave their families. It is noteworthy that in 1948, children were involved in more than one half of all divorces granted to couples married from 7 to 23 years.

As might be expected, the average number of children in families broken by divorce increases with the duration of marriage prior to dissolution. The average per parent-couple rises from 1.3 children (including those from previous marriages) for families dissolved the first year to a maximum of 2.5 for families broken about the 20th year of marriage.

Turning from averages to the total number of children involved brings out the important fact that divorce-orphans are concentrated in the early years of marriage. This is, of course, a consequence of the high proportion of all divorces that occur at early durations of marriage. It means, obviously, that a large proportion of the children affected by divorce are at the younger ages. National data on this point are lacking, but recent statistics for several counties indicate that fully

Chart 1—Divorces per 1,000 Married Couples, According to Size of Family. United States, 1948



Source: Basic data on divorces and annulments collected by Statistical Bureau of the Metropolitan Life Insurance Company from 19 States and 16 counties in other States.

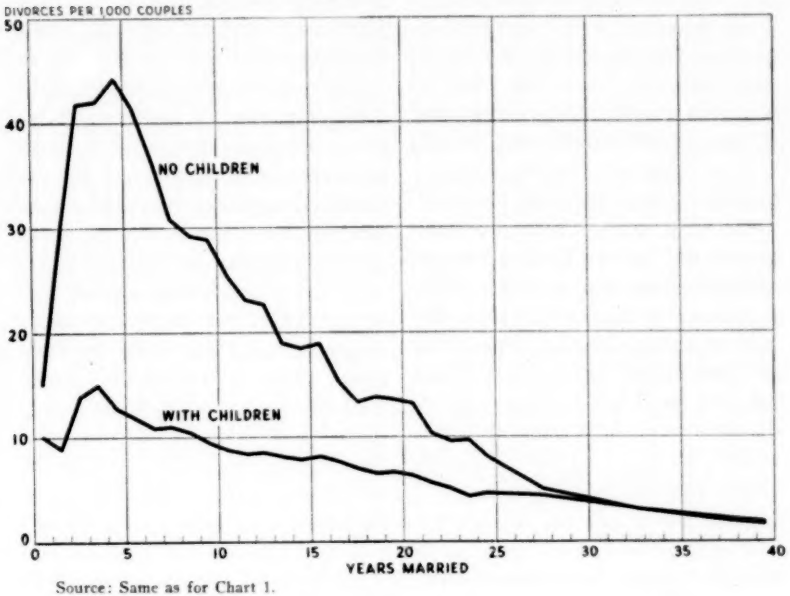
two thirds of the children affected by divorce are under age 10.

The divorce rate varies inversely with the number of children under age 18* in the family, as may be seen in Chart 1. For couples without children the divorce rate in 1948 was 15.3 per 1,000. Where one child was present the rate was 11.6 per 1,000. The figure thus continues to decrease, and in families with four or more children, the rate was 4.6. Altogether, the relative frequency of divorce for couples with children was little more than one half that for couples without minor children at the time of divorce.

The difference in the divorce rates between couples with and without children varies according to the duration of marriage, as is evident from Chart 2. For couples with children, the peak divorce rate, reached in the fourth year of marriage, was 15 per 1,000 in 1948. In childless families, however, the rate rose to a maximum of 44 per 1,000 couples in the fifth year of marriage, or to about three times the rate for couples with children. As the length of married life increases, the difference in the relative frequency of divorce between the two groups diminishes. By the 20th year of marriage the ratio was two to one; after the 30th year the

* The discussion which follows is based on children under age 18, instead of under age 21. This change is made because the Bureau of the Census in 1948 provided data from which it is possible to estimate the distribution of existing marriages only according to the number of children under 18 years of age.

Chart 2—Divorce Rate for Married Couples With and Without Children Under Age 18, According to Duration of Marriage. United States, 1948



Source: Same as for Chart 1.

two rates were practically identical.

These findings indicate that the relative frequency of divorce is greater for families without children than for families with children. Yet, the presence of children is not necessarily a deterrent to divorce. It is possible that in most cases both divorce and childlessness result from more fundamental factors in the marital relationship. Moreover, while some unsuccessful marriages may not be broken until the children have grown up, their number is less than is popularly believed in view of the small difference in the rate between the two groups at the later years of marriage.

The 1950 Census of Population

THE 17th Census of the United States, to be taken as of April 1st of this year, will mark another milestone in the history of the Nation. The facts collected for each individual, when summarized, will provide a full-length picture of our human resources.

This decennial count of the people is a major undertaking.

and great care is being taken to make it as complete and as accurate as possible. Every phase of this vast project has been meticulously planned, from the questions to be asked to the publication of the basic reports. The 140,000 enumerators who will go from door to door to fill in the data on the Census schedules will be carefully trained for their task. These schedules, when returned by the enumerators to the local offices, will be scrutinized on the spot for omissions and obvious inaccuracies. Errors caught in this way can usually be corrected with little delay. When the completed schedules are sent to the Bureau of the Census in Washington, D. C., they will again be edited for errors.

In order to provide information from the 1950 Census as soon as possible, preliminary estimates will be made on the basis of a sample of the returns. Sampling will also be used to study certain details that would be too costly to gather or to tabulate from all the returns. A special feature of the Census will be a check on its completeness and accuracy by means of an intensive follow-up survey, on a sampling basis, by specially trained enumerators.

The careful preparations that the Bureau of the Census has made for the 1950 Census promises the best enumeration of population yet undertaken in this country, and should yield a rich storehouse of trustworthy data for an analysis of the structure and movement of our people. Upon such studies rest many important decisions made by Congress, State legislatures, and public administrators. Communities can make excellent use of this information in planning health, educational, and other services for their people. Business also depends upon Census data and reports for its plans. Students of social and economic trends will find these data invaluable for their investigations. The 1950 Census needs and fully deserves the wholehearted cooperation of the American people.

School Absenteeism

THE absence of children from school is an important and continuing problem for school administrators and teachers, as well as for the children themselves and their parents. Yet there is generally little provision for the detailed recording of the causes of absence.

In order to demonstrate the use of carefully kept records on school absenteeism in planning a more adequate and comprehensive school health program, a study was conducted in selected schools throughout Canada during 1946-1947, and another was made in selected California cities in January-June, 1947. Inasmuch as the results for both studies are similar, only the major findings for California are pre-

sented; these are summarized in the accompanying table. It should be clearly understood that the findings are subject to certain limitations, and are indicative primarily of the situation as it existed in that area and in the period covered. This short interval may not be typical because of the periodic variation in the prevalence of the communicable diseases. Moreover, statements on the cause of absence are not always reliable, in spite of careful plans for recording such information.

Approximately 7,700 pupils were included in the California study. As measured against total school time, there were 30 absences and 76.3 school days lost per 1,000 pupil days. The average length of absence was 2.5 days. Medical causes accounted for 81 percent of all absences and for even a larger percentage—87 percent—of the days lost. The average length of medical absences was 2.7 days as against 1.8 for nonmedical absences.

Respiratory diseases accounted for nearly one half both of the absences and of the time lost. The largest item in this category was the common cold, accounting for about one third of all absences and of the days lost. In terms of number of ab-

RELATIVE FREQUENCY OF ABSENCES, BY CAUSE, AMONG GRADE SCHOOL CHILDREN. SELECTED SCHOOLS IN SEVEN CALIFORNIA CITIES. JANUARY-JUNE, 1947

CAUSE OF ABSENCE	PERCENT		RATE PER 1,000 PUPIL DAYS	
	Of All Absences	Of All Days Lost	Absences	Days Lost
GRAND TOTAL	100.0	100.0	30.0	76.3
Medical—Total	81.2	86.8	24.4	66.2
Respiratory Diseases	46.4	46.1	13.9	35.2
Acute—Total	43.2	42.0	12.9	32.1
Common cold	35.5	31.0	10.5	23.7
Influenza, grippe	3.7	6.5	1.1	5.0
Sore throat, tonsillitis	4.2	4.5	1.3	3.4
Other	3.2	4.1	1.0	3.1
Common Communicable Diseases	3.5	12.9	1.1	9.8
Whooping cough	.5	3.1	.2	2.4
Chickenpox	1.8	6.2	.5	4.6
Mumps	.9	2.8	.3	2.2
Other	.3	.8	.1	.6
Skin Disorders	2.6	4.9	.8	3.8
Contagious	1.4	3.5	.4	2.7
Non-contagious	1.2	1.4	.4	1.1
Digestive Conditions	10.8	6.0	3.2	4.6
Dental Conditions	2.3	1.5	.7	1.1
Ear Conditions	1.6	1.7	.5	1.3
Eye Conditions	1.4	1.2	.4	.9
Operations	.7	2.1	.2	1.6
Tonsils and adenoids	.5	1.3	.16	1.0
Other	.2	.8	.06	.6
Miscellaneous	7.6	6.4	2.3	4.9
Headache	4.4	2.0	1.3	1.5
Muscle and joint aches and pains	.6	.3	.2	.2
Other	2.6	4.1	.8	3.2
Injuries—Total	2.7	2.8	.8	2.2
By cutting or piercing instruments	.3	.2	.1	.2
Falls	.6	.7	.2	.5
Other	1.8	1.9	.5	1.5
Other Medical	1.5	1.2	.5	.9
Non-Medical—Total	18.8	13.2	5.6	10.1
Truancy	1.3	.9	.4	.7
Home help needed	3.8	2.1	1.1	1.6
Parental neglect	3.2	2.0	1.0	1.5
Trip; out of town	4.4	4.8	1.3	3.6
Others	6.1	3.4	1.8	2.7

NOTE—This study, which was sponsored by the California State Department of Education and the State Department of Health, was a cooperative effort of State and local health and educational authorities, with the aid and participation of the Metropolitan Life Insurance Company.

sences, the digestive conditions held second rank. These are chiefly minor disorders and are of relatively short duration. On the other hand, communicable diseases, which accounted for nearly 4 percent of the absences, were responsible for 13 percent of the time lost. In the period covered by the study, only chickenpox, mumps, and whooping cough were prevalent in the area surveyed, but since regulations for all these common childhood diseases call for exclusion from school until the period of communicability is passed, it is to be expected that the duration of absence will be higher than for other causes.

Surprisingly enough, skin disorders accounted for as much as 5 percent of the days lost and ranked fourth among causes of medical absences in this respect. The major portion of this was due to contagious conditions with relatively long periods of absence. While this situation may reflect to some extent the particular area or the particular sample studied, that in itself would be of importance in health education and in alerting the medical and public health authorities to institute measures for the eradication of such infections.

Accidents accounted for a relatively small part of the total absenteeism—3 percent of the absences and time lost. The details reported by the pupils indicated that many of these accidents were avoidable. A significant number of the injuries were caused by sharp instruments, falls, and by bicycle accidents, a few of which involved collisions with motor vehicles.

Details of the causes of nonmedical absences are likewise of interest and value to the teacher, the school administrator, and to parents. Thus, trips and shopping expeditions on which the child was taken were the most frequently reported reasons for nonmedical absence. Other important causes were home conditions, including the need for the child to help with household tasks, or because of illness at home. Relatively little of the nonmedical absence was reported to be frank truancy. Only among older boys is truancy a significant cause of lost school time.

In the aggregate, there are only minor differences between the two sexes in the rate of absence or time lost. The rate is slightly higher for girls, particularly in the upper grades and for medical reasons. It is significant that even so early in life the sickness rate is greater for females than for males, which is also the situation in adult life. Even the nonmedical absence rate is a little higher for girls, although the causes of such absence show significant differences as between boys and girls.

The economic status of the family also influences the absence rate, the poorer families showing a higher rate than those in better circumstances. This is particularly so with regard to nonmedical absences. The medical causes of absences likewise show some significant differences

according to economic status. A striking example is the frequency of contagious skin disorders, which is several times greater in children from the poorer families. However, the study in the Canadian schools consistently showed that home conditions exert a considerably more potent influence on school absenteeism than does the general economic status of the family.

Teachers and administrators who participated in the study discovered that both the detailed records of absenteeism and the facts compiled from these records have a variety of uses. They give the school administrator a good idea of the amount of controllable absenteeism and of the measures necessary to correct the situation. The information on absenteeism also has other uses, such as in parent-school relationships and in improving environmental conditions, which are an integral part of the whole school health program. It is, therefore, highly desirable to encourage the improvement of present procedures in recording absences from school. More and more school administrators are taking steps necessary to set up such effective systems of absentee records and to analyze them for the more constructive health care and education of the children.

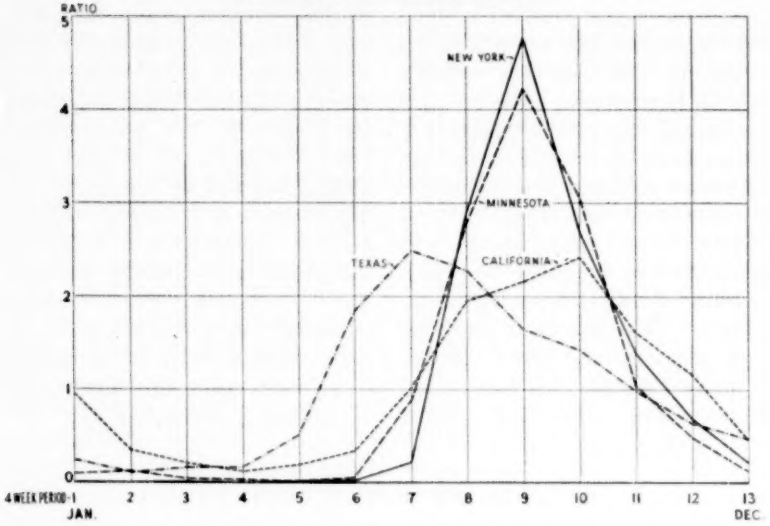
Variability of Poliomyelitis

POLIOMYELITIS is in many ways an unpredictable disease. The attack rate varies widely over the country in any given year, and there is no apparent geographic pattern in the areas affected in successive years. Furthermore, there is considerable variation in the time of the year when the disease reaches its peak incidence, although outbreaks of poliomyelitis usually occur in the summer and early fall.

A good illustration of the variability of poliomyelitis is the experience of last year, when more than 42,000 cases were reported in the United States, the largest number for any year on record. Provisional figures show that the attack rate last year ranged from a high of 86 per 100,000 population in Idaho to a low of 5 in South Carolina. For the country as a whole, the figure was 28. Rates well above the national average were recorded in the entire midwest and in the majority of Mountain States. In Montana, however, the rate was low. Similarly, the belt comprising most of New England and New York and New Jersey experienced higher than average rates, yet the figure in adjacent Pennsylvania was among the lowest in the country in 1949. The Pacific Coast, the South Atlantic, and the Gulf States as a whole were little affected, but Texas was an exception.

The experience for 1949 differs substantially from that for the preceding year. Several of the States with high rates in 1949 had also

Chart 1—Ratio of Poliomyelitis Cases in Successive 4-Week Periods to the Average 4-Week Period, for Selected States, 1949



been seriously affected the previous year. This was particularly true for parts of the West North Central area. On the other hand, many of those hardest hit in 1949 had relatively few cases the year before. For example, the attack rate in Missouri last year was 4 times as high as in 1948, in North Dakota more than 5 times as high, and in Maine, 12 times as high. In contrast, some of the States most affected in 1948 were relatively free of the disease in 1949. The outstanding example is North Carolina, where the rate for 1949 was only one tenth that recorded a year earlier. Many States show a relatively low incidence of the disease in both years. Even where the rates were high both years, the areas affected within the State generally varied from one year to the next.

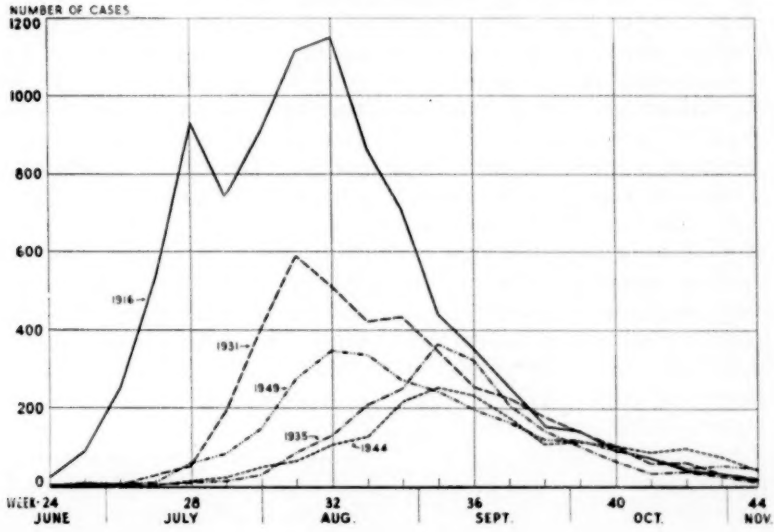
Although the attack rate for the Nation as a whole was at a peak last year, the highest rate for any individual State—86 per 100,000 in Idaho—has been exceeded in past years. New York and New Jersey in the epidemic of 1916, Minnesota in 1946, and South Dakota in 1948 all recorded attack rates well over 125 per 100,000 population.

Once a local epidemic is under way, it cannot be predicted how serious it will become or when the peak will be reached because of the variations in the seasonal pattern of the disease. For the nation as a whole in 1949, three fourths of the cases occurred in July through September,

but in California and Texas the proportion in this period was only about one half. Peaks, varying in level, ranged in time from early July in Texas to late September in California. Chart 1 shows the seasonal variability of the disease in 1949 for four widely separated States with large numbers of cases. The chart shows the ratio of the number of cases in successive four-week periods to the four-week average during the year. In Texas and in California this ratio in the peak period was about 2½ times the average as compared with more than 4 times in New York and in Minnesota. Moreover, the peak generally occurred at different periods in the various States. The disease tends to be more concentrated in certain months in the northern States than in the milder South.

Even within a specific area the pattern of the disease varies in different epidemic years. This is illustrated by the course of the disease in New York City during various epidemic years. Thus, Chart 2 shows that the peak week has varied from early in August to early in September. There is considerable variation in the rate of rise to the peak as well as in the subsequent rate of decline. The unpredictability of the seriousness of an impending epidemic is further illustrated by the fact that the cases reported in July constituted one ninth of the year's total in 1949, but only one twenty-fifth in

Chart 2—Cases of Poliomyelitis Reported in Specified Weeks of Epidemic Years, New York City



the earlier epidemic year 1944. Although the level of reported cases has been high for the country as a whole in recent years, the incidence of the disease in New York City during this period has been well below that recorded in 1916 and 1931.

Cases of the disease in the North are generally concentrated between July and September, yet remarkable exceptions to this rule occur. Illustrative of this are the two related outbreaks among Eskimos in northern Canada—the first beginning in October 1948 and extending to the next spring, and the second beginning in January of 1949 and extending into April.*

The marked increase in the incidence of poliomyelitis cases in this country in recent years may be due in part to the better reporting of nonparalytic cases of the disease. In some areas, moreover, the accuracy of the diagnosis is doubtful in an appreciable number of cases because of the concurrent prevalence of a virus infection, the symptoms of which resemble those of nonparalytic poliomyelitis.

In view of the unpredictability of poliomyelitis, it is necessary that any program to combat the disease be kept very flexible. This will allow quick mobilization of resources when and where the need may arise.

*Peart, A. F. W., "An Outbreak of Poliomyelitis in Canadian Eskimos in Wintertime," Canadian Journal of Public Health, Volume 40, October 1949, page 405.

New Classification of Causes of Death

BEGINNING with January of this year, the mortality statistics of the Metropolitan Life Insurance Company are being classified in accordance with the 6th Revision of the International List of Causes of Death, as well as the 5th. The International Conference which approved the new list also adopted new rules for selecting the cause of death to be tabulated when two or more conditions appear on the death certificate. Under the former rules of classification, priority was determined by reference to the Manual of Joint Causes of Death. Under the new rules, the cause tabulated is the underlying one specified by the physician who completes the death certificate.

Death rates will be reported among the Industrial policyholders of the Company during 1950 according to both the 5th and 6th Revisions of the International List. In this way, the reader will have a measure both of the actual trend of mortality for individual causes as compared with 1949, and the effect of the changes in procedure on the death rate. It is evident from the table on page 11 that the causes showing the largest decreases by the change in coding procedure are chronic nephritis, diabetes, syphilis, pneumonia, and cirrhosis of the liver—those which are frequently reported jointly with other causes. The largest increase is recorded for the cardiovascular diseases.

DEATH RATES* PER 100,000 POLICYHOLDERS FROM SELECTED CAUSES ACCORDING TO THE SIXTH AND THE FIFTH REVISION OF THE INTERNATIONAL LIST
INDUSTRIAL PREMIUM-PAYING BUSINESS, *Weekly and Monthly Combined*
METROPOLITAN LIFE INSURANCE COMPANY

January 1950

INTERNATIONAL LIST NUMBER (6TH REVISION)	CAUSE OF DEATH	ANNUAL RATE PER 100,000 POLICYHOLDERS*		
		6th Revision	5th Revision	
		January 1950	January 1950	January 1949
	ALL CAUSES—TOTAL	703.3	703.3	691.8
1-19	Tuberculosis (all forms)	23.4	24.4	26.0
1- 8	Tuberculosis of respiratory system	21.2	22.3	23.8
20-29	Syphilis	3.5	4.6	5.3
50,55-56,85	Communicable diseases of childhood	.8	.8	.6
80	Acute poliomyelitis	.4	.6	.5
140-205	Malignant neoplasms	119.2	123.9	118.1
260	Diabetes mellitus	14.4	28.3	26.2
[330-334,410-450,590-594]	Diseases of the cardiovascular-renal system	359.2	346.9	350.8
330-334	Vascular lesions, central nervous system	70.2	63.2	64.1
410-443	Diseases of heart	261.4	242.1	243.8
410-416	Chronic rheumatic heart disease	14.7	16.1	16.5
420-422	Arteriosclerotic and degenerative heart disease	182.1	†	†
440-443	Hypertension with heart disease	56.9	†	†
430-434	Other diseases of heart	7.7	†	†
444-447	Hypertension without mention of heart	7.3	1.4	1.2
450	General arteriosclerosis	8.1	6.2	7.0
590-594	Nephritis and nephrosis	12.2	34.0	34.7
490-493	Pneumonia	19.1	20.6	25.8
480-483	Influenza	2.8	1.9	2.3
540-542	Ulcer of stomach and duodenum	4.8	4.9	4.6
550-553	Appendicitis	1.0	1.3	2.5
560-561,570	Hernia and intestinal obstruction	4.5	4.4	5.3
543,571-572	Gastritis, duodenitis, enteritis, etc.	2.7	2.6	2.1
581	Cirrhosis of liver	11.0	12.2	10.4
640-689	Complications of pregnancy, childbirth	2.3	2.4	2.6
E963,E970-E979	Suicide	6.2	6.2	5.6
E964,E980-E984	Homicide	3.1	3.1	2.7
[E800-E802,E810-E835,E840,-E962] E810-E835	Accidents—total	38.5	40.5	38.8
	Motor vehicle	16.4	17.0	14.7
	Home	8.3	9.7	9.9
	Occupational	3.6	3.7	3.3
	All other causes	86.4	74.0	61.4

*The rates for 1950 and 1949 are provisional.
†Not available separately.

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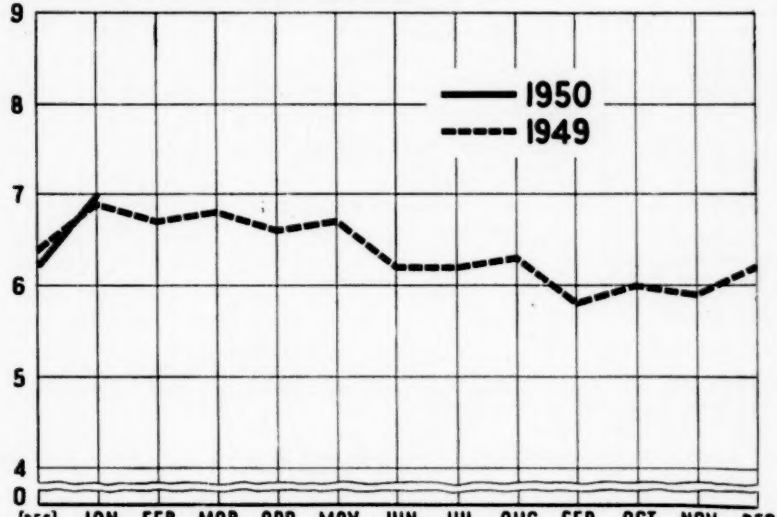
DEATH RATES PER 1,000 POLICYHOLDERS · ANNUAL BASIS



Figures are provisional

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